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Substitute	for form 1449/PTO	1			Complete if Known			
000000				Application Number	TBA			
INFO	PRMATIO	N DIS	CLOSURE	Filing Date	July 14, 2003			
STA	TEMENT	BY A	PPLICANT	First Named Inventor	Steven R. HETZLER			
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Sheet	3	of	4	Attorney Docket Number	ARC9-2003-0014-US1			

		NON PATENT LITERATURE DOCUMENTS			
Examine Initials*	r Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issu number(s), publisher, city and/or country where published.			
/GL	21	G.A. ALVAREZ et al., Tolerating Multiple Failures in RAID Architectures with Optimal Storage and Uniform Declustering, Computer Architecture News (USA), V. 25, #2, pp. 62-72, May 1972.			
DOORSOODS	22	V. BOHOSSIAN et al., Computing in the RAIN: A Reliable Array of Independent Nodes, pp. 1-20, September 24, 1999.			
***************************************	23	P.M. CHEN et al., RAID: High-Performance, Reliable Secondary Storage, ACM Computing Surveys, Vol. 26, No. 2, pp. 146-185, June 1994.			
CATABOO CATABO	24	M. HOLLAND et al., Parity Declustering for Continuous Operation in Redundant Disk Arrays, ACM 0-89791-535-6/92/0010/0023, pp. 23-35, October 1992.			
200000000000000000000000000000000000000	25	N.K. OUCHI, Two-Level DASD Failure Recovery Method, IBM Technical Disclosure Bulletin, Vol. 36, No. 03, pp. 187-190, March 1993.			
000000000000000000000000000000000000000	26	D.A. Patterson et al., A Case for Redundant Arrays of Inexpensive Disks (RAID), ACM 0-89791-268-3/88/0006/0109 1998.			
NO SERVICE DE LA CONTRACTOR DE LA CONTRA	27	J.S. PLANK, A Tutorial on Reed-Solomon Coding for Fault-Tolerance in RAID-like Systems, pp. 1-19, February 19, 1999.			
N45000000000000000000000000000000000000	28	E.J. SCHWABE et al., Evaluating Approximately Balanced Parity-Declustered Data Layouts for Disk Arrays, ACM 0-89791-813-4/96/05, pp. 41-54, 1996.			
000000000000000000000000000000000000000	29	E.J. SCHWABE et al., Flexible Usage of Parity Storage Space in Disk Arrays, ACM 0-89791-809-6/96/06, pp. 99-108, 1996.			
2006830006830000	30	L. Xu et al., X-Code: MDS Array Codes with Optimal Encoding, IEEE Trans. On Information Theory, Vol. 45, No. 1, pp. 272-276, January 1999.			

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Examiner		Date	· · · ·
Signature	/Guy Lamarre/ (03/21/2008)	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

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Sheet	4	of	4	Attorney Docket Number	ARC9-2003-0014-US1	

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/GL/	31	M. Blaum et al., "MDS Array Codes with Independent Parity Symbols," IEEE Trans. on Information Theory, Vol.IT-42, pp. 529 542, March 1996.	
	32	M. Blaum et al., "The EVENODD Code and its Generalization," High Performance Mass Storage and Parallel I/O: Technologies and Applications,' edited by H. Jin et al., IEEE & Wiley Press, New York, Chapter 14, pp. 187 208, 2001.	
	33	M. Blaum et al., "EVENODD: An Efficient Scheme For Tolerating Double Disk Failures In A RAID Architecture," IEEE Trans. on Computers, Vol. 44, No. 2, pp. 192-202, Feb. 1995.	
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Examiner	/Guy Lamarre/ (03/21/2008)	Date	
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				DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2 (# known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
/GL/	1	<sup>US-</sup> 5,134,619	07-28-1992	Henson et al.	
	2	<sup>US-</sup> 5,148,432	09-15-1992	Gordon et al.	
	3	US- 5,257,391	10-26-1993	DuLac et al.	
000	4	<sup>US-</sup> 5,301,297	04-05-1994	Menon et al.	
0000	5	<sup>US-</sup> 5,398,253	03-14-1995	Gordon	
	6	US- 5,506,977	04-09-1996	Jones	
9000	7	US- 5,579,475	11-26-1996	Blaum et al.	
9	8	US- 5,835,938	11-10-1998	Yamamoto et al.	
8	9	<sup>US-</sup> 5,848,229	12-08-1998	Morita	
9	10	US- 5,937,428	08-10-1999	Jantz	
	11	US- 6,070,249	05-30-2000	Lee	
	12	<sup>US-</sup> 6,138,125	10-24-2000	DeMoss	
	13	<sup>US-</sup> 6,154,853	11-28-2000	Kedem	
	14	<sup>US-</sup> 6,161,165	12-12-2000	Solomon et al.	
90000	15	us- 6,269,453 B1	07-31-2001	Krantz	
	16	<sup>US-</sup> 6,275,898 B1	08-14-2001	DeKoning	
	17	<sup>US-</sup> 6,279,138 B1	08-21-2001	Jadav et al.	
	18	<sup>US-</sup> 6,353,895 B1	03-05-2002	Stephenson	
0000	19	<sup>US-</sup> 6,530,004 B1	03-04-2003	King et al.	

		FORE	<b>GN PATENT DOCU</b>	MENTS		
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			U.S. PATENT	DOCUMENTS	
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/GL/	20	<sup>US-</sup> 2002/0035667 A1	03-21-2002	Bruning, III et al.	
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